

Correction to “Newtonian versus non-Newtonian upper mantle viscosity: Implications for subduction initiation”

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[1] In the paper “Newtonian versus non-Newtonian upper mantle viscosity: Implications for subduction initiation” (*Geophysical Research Letters*, 32, L19304, doi:10.1029/2005GL023457, 2005), there was a typographical error in equation (2). The stress exponent, n , is missing from the denominator in the exponential. The correct form of the

viscosity law when no melt is present and water content is constant is given by

$$\eta = \left(\frac{d^p}{AC_{OH}^r} \right)^{\frac{1}{n}} \dot{\epsilon}^{\frac{1-n}{n}} \exp \left[\frac{E^* + PV^*}{nRT} \right]$$

where A is the experimentally determined pre-exponential factor, d is the grain size, C_{OH} is the concentration of hydroxyl ions in the olivine, E^* is the activation energy, V^* is the activation volume and P is the lithostatic pressure.